

No. 621,700.

Patented Mar. 21, 1899.

A. OLSON.
GUITAR BRIDGE.

(Application filed Feb. 23, 1898.)

(No Model.)

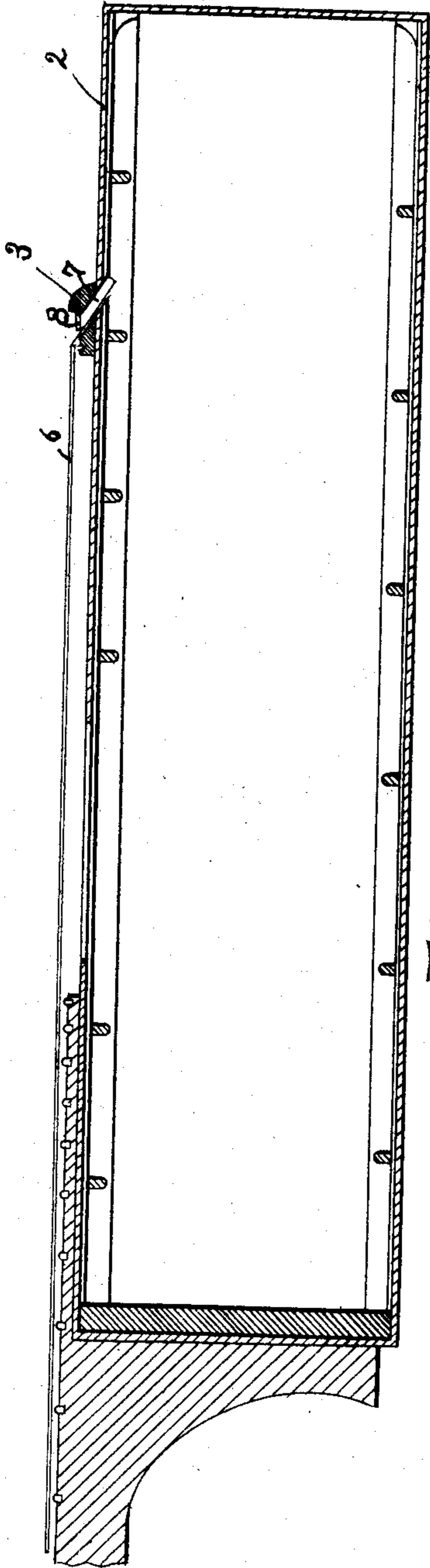


Fig. 1.

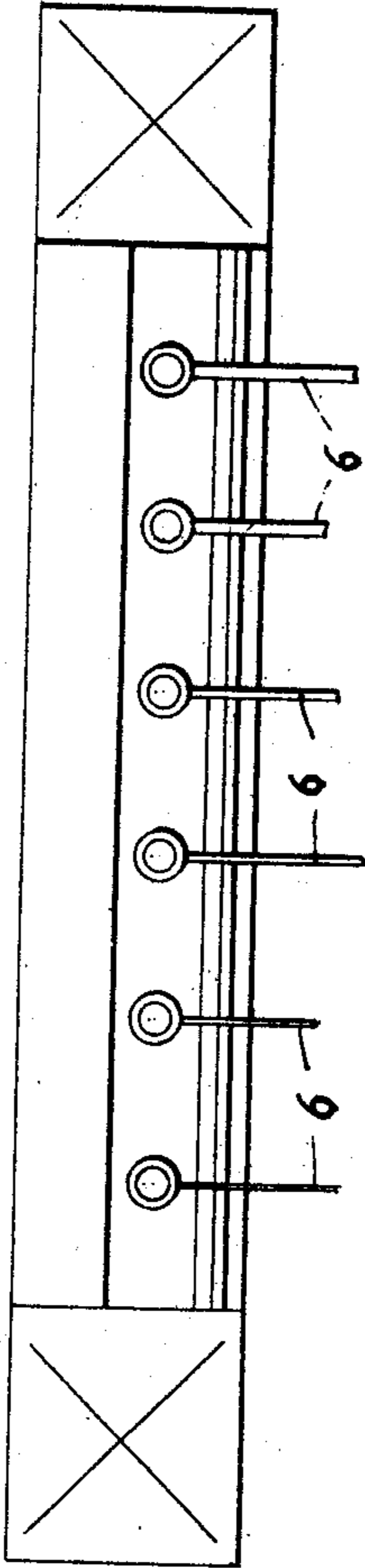


Fig. 2.

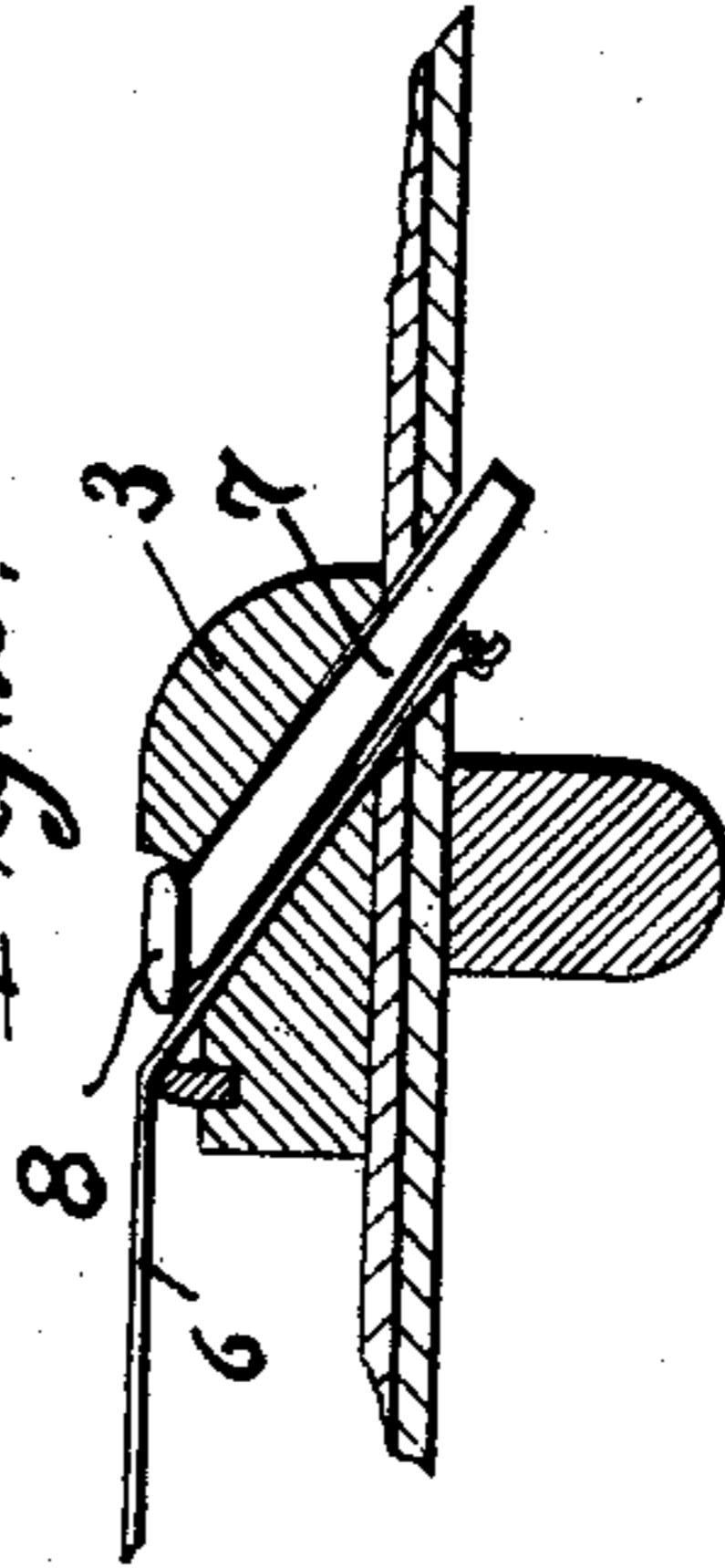


Fig. 3.

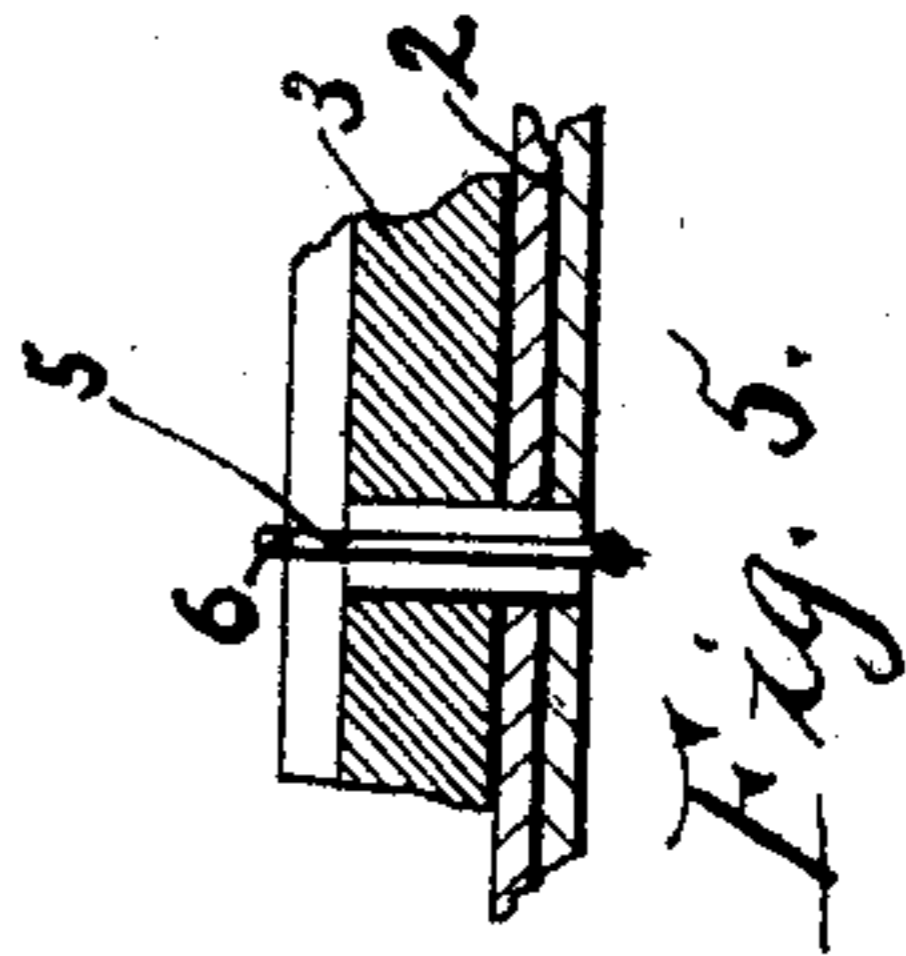


Fig. 4.

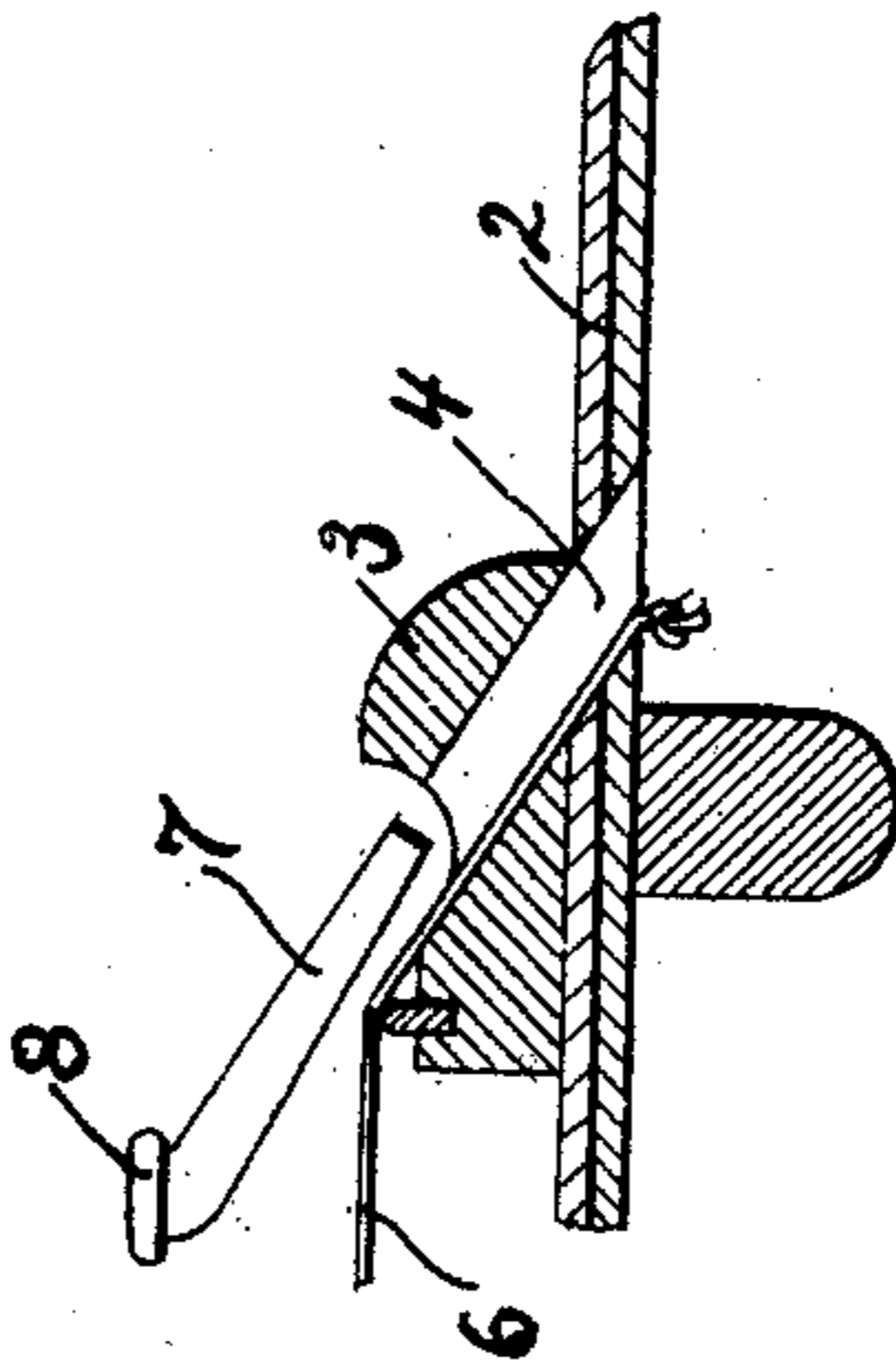


Fig. 5.

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UNITED STATES PATENT OFFICE.

ABRAM OLSON, OF DALSTROP, MINNESOTA.

GUITAR-BRIDGE.

SPECIFICATION forming part of Letters Patent No. 621,700, dated March 21, 1899.

Application filed February 23, 1898. Serial No. 671,221. (No model.)

To all whom it may concern:

Be it known that I, ABRAM OLSON, of Dalstrop, Chisago county, Minnesota, have invented certain new and useful Improvements in Guitar-Bridges, of which the following is a specification.

My invention relates to guitar-bridges; and the object of the invention is to provide an improved means for securing the ends of the guitar-strings to the bridge, whereby the direction of the pull when the strings are placed under tension will be at such an angle to the top of the guitar that the strain will be more evenly distributed and all warping and twisting of the top of the instrument will be avoided.

The invention consists in a guitar-bridge having a series of holes or openings, said holes being inclined with respect to the top of the guitar and adapted to receive the ends of the strings, and means securing the strings therein.

Further, the invention consists in providing a bridge having inclined or slanting holes adapted to receive the ends of guitar-strings and pins fitting within said holes, whereby said strings are secured, and said pins having heads inclined with respect to their axes, all as hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a longitudinal section of a guitar embodying my invention. Fig. 2 is a plan view of a guitar-bridge, showing the ends of the strings secured therein. Fig. 3 is a section of a bridge, showing the end of a string resting within the inclined hole or opening. Fig. 4 is a similar view showing the pin securing the string within the bridge. Fig. 5 is a detail section of a bridge, showing a string resting in the groove provided in the inclined hole.

In the drawings, 2 is the top of a guitar of ordinary construction, upon which is secured a bridge 3 in the usual manner, said bridge being provided with a series of inclined holes or openings 4, leading from the top to the bottom of the bridge and down through the top of the guitar. These holes or openings are provided with longitudinal grooves or recesses 5 in their walls to receive the ends of the guitar-strings 6, said strings having knots in their ends to prevent the string from being pulled

out of the grooves when under tension, as shown in Figs. 3 and 4. To prevent the strings from slipping out of the recesses in the holes 4, I provide pins 7, adapted to fit snugly within the holes 4 and having heads 8, which are inclined slightly to the axes of the shank or main portion of the pins, so that when the pins are thrust into the holes in the bridge the tops of the heads 8 will be substantially horizontal and flush with the top of the bridge, thereby presenting a much neater appearance than a pin made in the ordinary manner. The particular advantage of this method of securing the strings to the bridge lies in the fact that the pull will be lengthwise, substantially, to the top of the guitar and not at an angle thereto, as in the ordinary manner of securing the strings. I have found that when the strings are secured in vertical openings in the bridge the strain tends to bulge the top of the guitar upon one side of the bridge and to depress it upon the other, thereby warping and twisting the top and very materially affecting the tone, and consequently the value, of the instrument. I have found, however, that by securing the ends of the strings in the manner I have shown and described the strain is more evenly distributed and there is no tendency to warp or twist the top of the instrument.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with a guitar-top, of a bridge provided with a series of holes or openings to receive the ends of guitar-strings, said holes being inclined with respect to said top toward the head of the instrument, and means securing the strings therein.

2. The combination, with a guitar-top, of a bridge secured thereon and provided with a series of holes or openings extending through said bridge and through the top of the guitar, said bridge being also provided with grooves or recesses in the walls of said holes to receive the ends of guitar-strings and being inclined with respect to said top toward the head of the instrument whereby the strain upon the bridge and top is changed from a vertical direction to a direction substantially parallel with said top, and means securing said strings within said grooves, substantially as described.

3. The combination, with a guitar-top, of a
bridge secured thereon and provided with a
series of inclined holes or openings extend-
ing through said bridge and top, pins fitting
5 within said holes or openings and having
heads inclined with respect to their axes, and
said holes being inclined toward the head of
the instrument, whereby the strain upon the
top and bridge is changed from a vertical di-

rection to a direction substantially parallel to
with said top, substantially as described.

In testimony whereof I have hereunto set
my hand and seal this 14th day of February,
1898.

ABRAM OLSON. [L. S.]

In presence of—

L. J. STARK,
E. W. STARK.